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REMARKS

Claims 1-3, 5-9, 12-17, 19-29, 31-40 and 42-57 are presently pending. In the above-identified Office Action, the Examiner rejected Claims 8-9 and 12 under 35 U.S.C. 112. Claims 1-3, 5-7, 13-15, 19-20, 23-28, 46-47, 52-53 and 57 were rejected under 35 U.S.C. 103(a) as being unpatentable over Corcoran (US 20030063631, now US 6714581). Claims 16-17, 29, 31-40, 42-44 and 48-50 were rejected under 35 U.S.C. 103(a) as being unpatentable over Corcoran (US 20030063631, now US 6714581) in view of Waarts *et al.* (US 5677920). Claims 54-56 were rejected under 35 U.S.C. 103(a) as being unpatentable over Corcoran (US 20030063631, now US 6714581) in view of Ueda *et al.* "1kW CW output from fiber-embedded disk lasers", Conference of Lasers and Electro-Optics, 2002.

In response, Claim 8 was amended to be consistent with the language of the specification so as to obviate the rejection under section 112. Claims 1, 29 and 57 were amended to include the following structures: beam-flattening optics, first and second lenses, a single aperture located between the lenses at their focal points and a mirror. Claim 13 was amended to include the structure of the beam-flattening optics, a mirror and a light pipe having a length approximately equal to a diameter of a combined beam output from the beam-flattening optics, squared, divided by the beam wavelength. Claims 46 and 52 were amended to specify that the laser fibers are of Er:YAG crystal. New Claim 58 was added claiming a laser system having the limitation that different length laser fibers differed from one another by more than 1.5 centimeters. Various claims were amended for editorial reasons and Claims 9, 12, 14, 15, 19, 25 and 42 have been canceled.

Hence Claims 1-3, 5-8, 13, 16-17, 20-24, 26-29, 31-40 and 43-58 are presently pending.

None of the cited references, taken alone or in combination, make obvious the invention as presently claimed. That is, none of the references make obvious a laser system having beam-flattening optics and an external cavity or second means having first

and second lenses, a mirror and a single aperture located between the lenses at their focal points as claimed in Claims 1, 29 and 57; none of the references make obvious a laser system having the beam-flattening optics, a light pipe and a mirror where the length of the light pipe is equal to the diameter of the combined beam output from the beam-flattening optics, squared, divided by the beam wavelength as claimed in Claim 13; none of the references make obvious a laser system having fibers of Er:YAG as claimed in Claims 46 and 52; and none of the references make obvious a laser system having different length laser fibers which differ from one another by more than 1.5 centimeters as claimed in Claim 58.

In the above-identified Office Action, the Examiner stated that beam-flattening optics was well known in the art according to the Application and that, therefore it would have been obvious to one having ordinary skill in the art to provide a beam flattening optics to the spatial filter in order to flatten the laser beams for more efficient spatial coherency. The Examiner, however, cites no prior art discussing or, at least, suggesting how such beam-flattening optics has been used in the past. The mere fact that beam-flattening optics existed does not automatically mean that the presented Claims are made unpatentably obvious.

The Examiner also stated in the above-identified Office Action that Er:YAG would have been obvious to one having ordinary skill in the art because Corcoran discloses Nd:YAG and includes the catch-all phrase that "other solid-state lasers can be used as the gain media." Nothing is provided by Corcoran as to the existence of Er:YAG lasers and certainly not the use of such lasers. Instead, the specific teaching of Corcoran, at column 10, lines 14 through 16, is the use of "Nd:YAG lasers, Ruby lasers, Nd:YAG lasers, or Ho:YAG lasers."

The Examiner also stated in the above-identified Office Action that Corcoran discloses resonator cores having different lengths and refers to "fibers 14a-14n," presumably in Fig. 1A. Nowhere in the reference specification is mention made about the lengths of the fibers, whether they are equal or not equal in length. The drawing figures are all "schematics" and provide no teaching about fiber lengths. There is no legal or

regulatory authority to scale the lengths of the fibers from the drawing figures. The drawing figures simply show multiple fibers being used and nothing more.

Hence, the present Claims should be allowable. Accordingly, reconsideration, allowance and passage to issue are respectfully requested.

Respectfully submitted,
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